

## 33.865 River Review

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### Sections:

- 33.865.010 Purpose
- 33.865.020 When River Review is Required
- 33.865.030 Procedure
- 33.865.040 Supplemental Application Requirements
- 33.865.100 Approval Criteria
- 33.865.110 Modification of Site-Related Development Standards
- 33.865.120 Corrections to Violations of the River Environmental Overlay Zone Standards
- 33.865.200 Use of Performance Guarantees
- 33.865.210 Special Evaluations by a Trained Professional

### 33.865.010 Purpose

River Review is intended to:

- Protect, conserve and enhance identified resources and functional values in the River Environmental overlay zone, compensate for unavoidable significant detrimental impact to those resources and functional values, and ensure the success of mitigation and enhancement activities;
- Help the City meet existing and future requirements pursuant to federal and state laws including the Clean Water Act, the Safe Drinking Water Act, the Endangered Species Act, the Migratory Bird Treaty Act, and the National Flood Insurance Act;
- Provide flexibility for unusual situations. River Review allows for evaluation of alternative development scenarios that may have less detrimental impact on protected resources, and allows for the evaluation of off-site mitigation proposals;
- Provide a mechanism for the evaluation of detailed, site-specific information on the location or quality of resources and functional values;
- Provide a mechanism for modifying the location of the River Environmental overlay zone to reflect permitted changes in the location or quality of resources and functional values.

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## Commentary

Chapter 33.865 is a new chapter and the text is not underlined for ease of reading.

### **33.865 River Review**

This chapter contains the review process, application requirements and approval criteria for River Review. This is a new chapter and it replaces *Greenway Review* in the Central Reach.

- Provide for the replacement of resources and functional values that are lost through violations of the River Environmental overlay zone standards;
- Provide a mechanism to modify the River Environmental overlay zone standards of Chapter 33.475, River Overlay Zones; and
- Allow for modifications to site-related development standards when modification will result in greater resource protection.

### **33.865.020 When River Review is Required**

River Review is required in the following situations:

- A. When an applicant proposes non river-dependent or river-related primary uses within or riverward of the River Setback;
- B. When a development or regulated activity in the River Environmental overlay zone is not exempt from the River Environmental overlay zone regulations and either does not meet the standards of subsection 33.475.440 or there are no development standards applicable to the proposal;
- C. When River Review is required to correct a violation of the River Environmental overlay zone regulations, as described in subsection 33.475.450;
- D. When an applicant wishes to fine tune the boundary of the River Environmental overlay zone based on a detailed environmental study that more accurately identifies the location and quality of resources and functional values. Minor boundary changes are allowed through River Review. Map error corrections are reviewed under 33.855.070, Corrections to the Official Zoning Maps, and removal of the River Environmental overlay zone is processed as a change of overlay zone as stated in 33.855.060, Approval Criteria for Other Changes; or
- E. To modify the boundary of River Environmental overlay zone to reflect permitted changes in the location or quality of resources or functional values. The modification of River Environmental overlay zone procedure does not apply to changes caused by violations of subsection 33.475.440.

### **33.865.030 Procedure**

A River Review is processed through a Type IIx procedure, except as described in 33.475.450.B when River Review is required to correct a violation of the River Environmental overlay zone regulations.

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## Commentary

### **33.865.040 Supplemental Application Requirements**

The supplemental application requirements are substantially the same as those required for the Environmental Overlay Zones.

### 33.865.040 Supplemental Application Requirements

In addition to the application requirements of Section 33.730.060, the following information is required when the River Review application is for development in the River Environmental overlay zone, or for modification of the River Environmental overlay zone boundary:

**A. Supplemental site plan requirements.** One copy of each plan must be at a scale of at least one inch to 40 feet. Site plans must show existing conditions, conditions prior to a violation (if applicable), proposed development, and construction management. A mitigation site plan is required when the proposed development will result in unavoidable significant detrimental impact on the resources and functional values ranked high or medium in the *Willamette River Natural Resource Inventory* or when mitigation is proposed in order to meet River Review approval criteria. A remediation action site plan is required when significant detrimental impacts occur in violation of the Code and no permit was applied for. The Director of BDS may waive items listed in this subsection if they are not applicable to the specific review; otherwise they must be included. Additional information such as wetland characteristics or soil type may be requested through the review process.

1. The existing conditions site plan must show the following:
  - a. For the entire site:
    - (1) Location of any wetlands or water bodies on the site or within 50 feet of the site. Indicate the location of the top of bank, centerline of stream, ordinary high water, or wetland boundary as appropriate;
    - (2) 100-year floodplain and floodway boundaries;
    - (3) The top of bank of the Willamette River, and the structures and topographic contours referenced to determine the top of bank. The site plan depicting the top of bank must be drawn accurately to scale, and be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches. The scale of the drawing must be between 1 inch = 50 feet, and 1 inch = 10 feet. Ground elevations must be shown by contour lines at 2-foot vertical intervals. See Section 33.910.030, Environmental-Related Definitions, Top of Bank;
    - (4) Boundaries of the River Environmental overlay zone. These boundaries may be scaled in relation to property lines from the Official City Zoning Maps;
    - (5) Location and boundaries of designated scenic resources. The location of viewpoints, view corridors and scenic corridors must be show in relation to the property lines, existing and proposed public trails and boundaries of the River Environmental overlay zone;
    - (6) Topography shown by contour lines at two foot vertical contours in areas of slopes less than ten percent and at five foot vertical contours in areas of slopes ten percent or greater;

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- (7) Drainage patterns, using arrows to indicate the direction of major drainage flow; and
  - (8) Existing improvements such as structures, buildings, utility lines, fences, etc.
- b. Within the River Environmental overlay zone:
- (1) Distribution outline of shrubs and ground covers, with a list of most abundant species; and
  - (2) Trees over 3 inches in diameter identified by species and size, including the location of the trunk and the root protection zone or canopy drip line. In the case of a violation, also identify the trees that were cut or damaged by showing stump diameter and species.
2. A proposed development site plan must show the following:
- a. Location of the River Environmental overlay zone;
  - b. Location of all proposed development;
  - c. Location of proposed utility lines and connections, stormwater systems and septic or sewer facilities;
  - d. Location of protected view corridors;
  - e. Proposed final contour lines at 2-foot vertical intervals in areas of slopes less than ten percent and at 5-foot vertical contours in areas of slopes ten percent or greater;
  - f. Delineated areas of ground disturbance and vegetation removal;
  - g. Balanced cut and fill calculation for any grading in the 100-year floodplain; and
  - h. Location and species of existing tree, shrubs and ground covers to remain;
3. A construction management site plan must show the following:
- a. Location of the River Environmental overlay zone;
  - b. Delineated areas of ground disturbance and vegetation removal, including equipment maneuvering areas;
  - c. Proposed grading plan with existing and proposed contours. The grading plan must show proposed alteration of the ground at 2-foot vertical contours in areas of slopes less than ten percent and at 5-foot vertical contours in areas of slopes ten percent or greater;

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- d. Location of excavation and fill and total quantities of each;
  - e. Areas where existing topography and vegetation will not be affected by the development proposal;
  - f. Identification of trees to be removed using a bold X and the location of trees to remain including the required root protection zone;
  - g. Location of site access and egress;
  - h. Equipment and material staging and stockpile areas;
  - i. Erosion control measures; and
  - j. Measures to protect trees and vegetation in accordance with Title 11.
4. An on-site or off-site mitigation or remediation site plan must show the following
- a. Location of the River Environmental overlay zone in relation to the mitigation site;
  - b. Distribution outline, species composition, and percent cover of ground covers to be seeded or planted using standard landscape graphics;
  - c. Location, species, and size of each shrub and tree to be planted;
  - d. A planting table listing all trees, shrubs, groundcover or seeds to be installed including the ratio of seeds to area to be planted, species name (common and scientific), number, size and spacing;
  - e. The area of the mitigation site in square feet in relation to the project impact area;
  - f. The location of the mitigation site in relation to existing, proposed or anticipated future development on the site;
  - g. Stormwater management features, including retention, infiltration, detention, discharges, and outfalls;
  - h. Location of protected view corridors;
  - i. Water bodies to be created, including depth;
  - j. Water sources to be used, including volumes;
  - k. Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings.

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# Commentary

**B. Supplemental narrative.** The following is required:

1. Impact evaluation. An impact evaluation is required to determine compliance with the approval criteria, and to evaluate practicable development alternatives for a particular site. The alternatives must be evaluated on the basis of their impact on identified resources and functional values. Significant resources and functional values are identified in the *Willamette River North Reach Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2008)*, and a supplemental environmental assessment can be provided to more accurately identify resources and functional values on the site. In the case of a violation, the impact evaluation is used to determine the nature and scope of the significant detrimental impacts.

a. An impact evaluation includes:

(1) Identification, by characteristic and quantity, of the natural resources and their functional values found on the site. The *Willamette River North Reach Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2008)* provides site-specific information on natural resource features including:

- open water;
- shallow water (river depth 0-20 feet);
- beach;
- riparian vegetation;
- upland and bottomland forest;
- grassland;
- flood area and floodplain;
- wetlands, streams and ponds; and
- special habitat area.

The *Willamette River/Central Reach Natural Resources Inventory (2015)* provides site-specific information on the functional values provided by the various natural resource features including:

- Microclimate and shade;
- Stream flow moderation and water storage;
- Bank function, and sediment, pollution and nutrient control;
- Large wood and channel dynamics;
- Organic inputs, food web and nutrient cycling;
- Fish and wildlife habitat;
- Habitat connectivity/movement corridor;

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## Commentary

(2) Chapter 33.480, *Scenic Resources*, says that adjustments and modifications to the standards can be made through Environmental or River Review. Map 480-1 includes the location of Scenic (s) overlay zones and view corridors with special height limitations.

The Willamette River/Central Reach Natural Resources Inventory (2015) also provides information on wildlife and plant special status species that are known or reasonably expected to occur within or use a site. The application must contain current information regarding any special status species known or expected to occur on the site;

- (2) Identification of the scenic resources on the site. The Central City Scenic Resources Protection Plan (2015) provides site-specific information on the scenic resources. The application must contain current information regarding the scenic resources.
- (3) Identification of significant unavoidable detrimental impacts on identified natural and scenic resources and functional values. Actions that could cause detrimental impacts and should be identified include:
  - excavation and fill both in the water and above the ordinary high water mark. The quality and source of fill material is an important factor to be considered;
  - clearing and grading;
  - construction;
  - vegetation removal;
  - tree planting;
  - altering bathymetry;
  - altering a vegetated riparian corridor or upland vegetated area;
  - altering the floodplain;
  - altering the temperature of the river especially the altering of existing cold water sources;
- (3) Evaluation of practicable alternative locations, design modifications, or alternative methods of development that both achieve the project purpose, taking into account cost and technology, and minimize significant detrimental impacts on identified natural and scenic resources and functional values; and
- (4) Determination of the practicable alternative that best meets the applicable approval criteria.

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# Commentary

- b. An impact evaluation for a violation includes:
    - (1) Description, by characteristics and quantity, of the natural and scenic resources and functional values on the site prior to the violation; and
    - (2) Determination of the impact of the violation on the natural and scenic resources and functional values.
2. Biological assessment. A biological assessment developed for the purposes of a federal or state permit may be submitted in place of some or all of the impact evaluation if the biological assessment includes the information described in subparagraph B.1, above. In the event that the applicant submits a biological assessment in place of some or all of the impact evaluation, the applicant must identify which aspects of the impact evaluation are covered by the biological assessment and, if necessary, identify which pieces of information will be included in the impact evaluation.
3. Supplemental environmental site assessment. A site-specific environmental assessment, prepared by a qualified consultant, to more precisely determine the existence, location, type, extent, and quality of the natural resources and functions on the site can be provided as part of the supplemental narrative. The assessment may verify, supplement, or challenge the information in the City's inventory for the purpose of informing the impact evaluation and identifying mitigation obligations;
4. Construction management plan. Identify measures that will be taken during construction or remediation to protect the remaining natural and scenic resources and functional values at and near the construction site and provide a description of how areas that are not affected by the construction will be protected. For example, describe how trees will be protected, erosion controlled, construction equipment controlled, and the timing of construction; and
5. Mitigation or remediation plan. The purpose of a mitigation or remediation plan is to compensate for unavoidable significant detrimental impacts on identified natural and scenic resources and functional values that result from the chosen development alternative or violation. A mitigation or remediation plan includes:
  - a. Natural or scenic resources and functional values to be restored, created, or enhanced within mitigation or remediation area. If credits will be purchased from a City certified mitigation bank, the mitigation plan must identify the total number and the type of credits being purchased;
  - b. Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies;

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## Commentary

### **33.865.100.A Development within the River Environmental Overlay Zone**

The approval criteria for development within the River Environmental overlay zone are intended to protect and conserve the natural resources and functional values that exist in the overlay zone. The approval criteria are modeled on the environmental conservation overlay zone approval criteria and will allow development to occur as long as the applicant can show that all other practicable alternatives to locating development in the resource area have been explored and are not practicable within the context of project purpose. In cases where development will occur and resource values will be diminished, mitigation is required to compensate for the loss of function due to the development.

- c. Construction timetables;
- d. Operation and a long-term maintenance plan;
- e. Monitoring and evaluation procedures that include periodic reporting;
- f. Remedial actions for unsuccessful mitigation;
- g. Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings; and
- h. If off-site mitigation is proposed, demonstration that on-site mitigation is not practicable or ecologically beneficial.

**33.865.100 Approval Criteria.**

Requests for a River Review will be approved if the review body finds that the applicant has shown that all applicable approval criteria have been met.

**A. Development within the River Environmental overlay zone.** The applicant's supplemental narrative must demonstrate that all of the following are met:

- 1. Resource enhancement projects:
  - a. There will be no net loss of total resource area; and
  - b. There will be a significant improvement of at least one functional value.
- 2. All other proposals in the River Environmental overlay zone:
  - a. Proposed development minimizes the loss of identified natural or scenic resources and functional values consistent with the uses that are generally permitted or allowed in the base zone without a land use review, or permitted or allowed by an approved conditional use review;
  - b. Proposed development locations, designs, and construction methods are less detrimental to identified natural and scenic resources and functional values than practicable and significantly different alternatives, including alternatives on the same site but outside of the River Environmental overlay zone;

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## Commentary

### 33.865.100.A.2.d Mitigation

Mitigation for unavoidable impacts from development will be required for every River Review.

(3) The applicant will be required to show that the proposed mitigation compensates for all significant detrimental impacts to identified natural resources and functional values including the interim loss of resource area and functionality. Lost resource features and functions on the site will have to be fully replaced with in-kind resources, and any interim loss of functionality that will happen between the time the impacts occur and the time the mitigation site is mature will have to be addressed.

Through previous mitigation project, staff determined a mitigation ratio of 1.2:1 is the absolute minimum to account for time lag between impacts and mitigation establishment and that ratio is associated with mitigation for grassland habitat. Shrublands, woodlands and forests will have a longer time lag between impacts and establishment of mitigation. Therefore, a 1.5:1 ratio of project impact area to mitigation area is the least amount mitigation that may be proposed. This is also the mitigation ratio required by the standard 33.475.430.K, Mitigation.

During review it is possible that a higher mitigation ratio will be required due to the factors listed in 3.a-d. The applicant's response to 3.a, uniqueness of the features and functions, should include consideration of how rare the habitat or fish/wildlife are in the local area or region and if any species listed in the Natural Resources Inventory as *at-risk* are impacted, including Endangered Species Act listed species. The applicant's response to distance between the impact area and mitigation area should address the species being impacted and how well the mitigation area will serve those species that will have to relocate.

Item 3.d address the time for plants to grow and fully the replace the lost functions. The City or applicant may proposed a different mitigation ratio that better accounts for the time lag between impacts and a fully functioning mitigation site. Time lag is dependent on the plant and fish/wildlife species impacted and the time it takes for those functions to be replaced. An old growth bottomland hardwood forest can take more than 50 years to be replaced, where a grassland may take only a few years.

(4) On-site mitigation opportunities must be explored before off-site mitigation can be approved. On-site mitigation is a priority in cases where there is adequate space to mitigate based on the mitigation ratio, and appropriate conditions exist to support successful mitigation. An adequate on-site mitigation area should be able to sustain on-going resource functionality and habitat connectivity without being negatively impacted by surrounding development. On-site opportunities will be evaluated within the context of existing, proposed and future development on the site.

- c. There will be no significant detrimental impact on areas of the site reserved for mitigation, areas within the River Environmental overlay zone not proposed for development at this time, downstream river habitat within the Central Reach, or other sites in the Central Reach where environmental restoration is in progress or complete;
- d. Mitigation:
- (1) The mitigation plan must demonstrate that all significant detrimental impacts on identified scenic and natural resources and functional values, and the interim loss of functional value will be compensated for.
  - (2) To the extent practicable, the natural and scenic resources and functional values restored or enhanced as mitigation must be the same kind of resource, performing the same functional value as the lost resource.
  - (3) The amount of natural resource mitigation due as compensation will be based on the amount and relative condition of the resources and functional values impacted by the proposal. The amount of natural resource mitigation required will be no less than 1.5:1 of mitigation area to project impact area, but may be more to address the following:
    - the uniqueness of the resources and functional values impacted;
    - the relative condition of the mitigation area;
    - the distance between the impact area and mitigation area; and
    - the time lag between when the resources and functional values are lost due to the impacts and the point when the mitigation site will achieve full functions.
  - (4) Mitigation must occur on-site when practicable, and ecologically beneficial. Factors to be considered when evaluating this criterion include:
    - The potential for the long-term success of the restored resources and functional values in the mitigation area;

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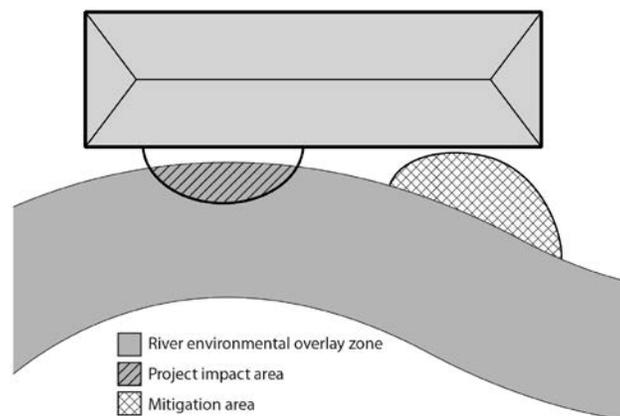
## Commentary

### **33.865.100.A.2.d.5 Mitigation**

A higher ratio of mitigation to impacts is applied to off-site mitigation because there are natural resources functions lost permanently when resources are removed at one location and mitigated for at a different location. A higher ratio ensures that compensation for moving the resources is accounted for. The mitigation can be completed outside of the River Environmental overlay zone provided that it is contiguous to the River Environmental overlay zone.

- The amount, size, shape, and connectivity potential of on-site mitigation areas;
  - The location of the mitigation area in relation to existing, proposed or future development on the site, and the impact development may have on the mitigation area;
  - Contamination; and
  - Any other site specific issue or constraint.
- (5) If on-site mitigation is not practicable or ecologically beneficial, the applicant may perform mitigation off-site. The off-site mitigation must meet 33.865.100.A.2.d.1-4 and the following:
- Mitigation must occur at a minimum 3:1 ratio of mitigation area to project impact area;
  - The mitigation area must be located within the Willamette River Central Reach;
  - The applicant must own the property or have an easement or deed that ensures the mitigation area will not be developed;
  - Mitigation must occur in the River Environmental Overlay Zone or in an area that is contiguous to the River Environmental Overlay Zone, see Figure 865-1.

**Figure 865-1  
Mitigation Area Contiguous to River Environmental Overlay Zone**



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## Commentary

### **33.865.100.B Modifications to zone boundaries**

These approval criteria are the same criteria used for modifications of Environmental Overlay zone boundaries and the boundary of the Pleasant Valley Natural Resource Overlay zone.

3. Additional, more detailed data may be provided that results in a remapping of the River Environmental overlay zone on a site. For example, a survey of the top of bank of a river, stream or drainageway may be provided. The City may need to perform a site visit to verify the data.

Modifications to the location of the River Environmental overlay zone based on more site specific data should be reviewed to determine if any natural resource features or functions have been altered in a way that constitutes a violation to 33.475. Natural resource features and functions change naturally over time due to weather changes, growth of new plants, flooding, etc. Natural changes can result in the features and functions moving on the site and thus the River Environmental overlay zone may need to change accordingly. However, if natural resource features or functions are altered by humans in a way that does not meet the exemptions or standards of 33.475, and have not been reviewed through 33.865, then the location of the River Environmental Overlay zone should not be changed.

3.a. The applicant may use the more detailed feature data (e.g., location of top of bank, flood area, tree canopy, etc.) and apply the adopted methodology of the Natural Resources Inventory to determine the revised location of high and medium ranked resources. This should be verified by the City using the Natural Resources Inventory GIS models.

### **33.865.110 Modification of Site-Related Development Standards**

This approval criterion allows adjustments to site-related development standards to be considered and approved as part of a River Review. The applicant must show that granting the adjustment will result in greater protection of the resources and functional values on the site and that the proposal is consistent with the purpose of the standard that is being adjusted. This approval criterion is the same as a criterion used in Environmental overlay zones and the Pleasant Valley Natural Resource Overlay zone.

**B. Modification of River Environmental overlay zone boundaries.** Modifications of River Environmental overlay zone boundaries that reflect permitted changes in the location or quality of resource areas will be approved upon finding that the applicant's statement demonstrates that either Paragraph B.1 or B.2 are met. Modification of environmental zone boundaries based on a more detailed site specific environmental study that confirms the location of natural resource features identified in the adopted Natural Resources Inventory, the applicant's impact evaluation must demonstrate that Paragraph B.3, below, is met:

1. Successful mitigation. An approved mitigation plan has been successful and a new, restored, or enhanced resource exists which should be included in the River Environmental overlay zone; or
2. Approved loss of resource area. All of the following must be met:
  - a. All approved development in a resource area has been completed;
  - b. All mitigation required of this development has been successful; and
  - c. The identified resources and functional values at the developed site no longer exist, or have been subject to a significant detrimental impact.
3. Modification of River Environmental overlay zone boundaries based on a more detailed site-specific environmental study. The River Environmental overlay zone line location may be modified to more accurately reflect the location of natural resources and functional values on the site. All of the following must be met:
  - a. The modified River Environmental overlay zone boundary must include all natural resource features that receive a high or medium rank using the methodology adopted in the adopted Natural Resources Inventory; and
  - b. The modified River Environmental overlay zone boundary must be located no closer than 50 feet from the top of bank of a river, stream, drainageway, wetland or other water body.

**33.865.110 Modifications of Site-Related Development Standards**

The review body may consider modifications to site-related development standards that are not otherwise prohibited from being adjusted as part of the River Review process. These modifications are done as part of the River Review process and are not required to go through the adjustment process. Adjustments to use-related development standards (such as floor-area ratios, intensity of use, size of the use or concentration of uses) are subject to the adjustment process of Chapter 33.805. In order to approve these modifications, the review body must find that the development will result in greater protection of the resources and functional values identified on the site and will, on balance, be consistent with the purpose of the applicable regulations.

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## Commentary

### **33.865.120 Corrections to Violations of the River Environmental Overlay Zone Standards**

These approval criteria are the same criteria that are used for violations of the Environmental overlay zones and for violations of the Pleasant Valley Natural Resource Overlay zone.

**33.865.120 Corrections to violations of the River Environmental Overlay Zone Standards**

For corrections to violations of the River Environmental development standards the application must meet all applicable approval criteria stated in Subsection 33.865.100.B, above, and Subsection A, and Paragraphs B.2 and B.3, below. If these criteria cannot be met, then the applicant’s remediation plan must demonstrate that all of the following are met:

- A.** The remediation is done in the same area as the violation; and
- B.** The remediation plan demonstrates that after its implementation there will be:
  - 1. No permanent loss of any type of resource or functional value;
  - 2. A significant improvement of a least one functional value; and
  - 3. There will be minimal loss of resources and functional values during remediation until the full remediation program is established.

**33.865.200 Performance Guarantees**

The Director of BDS may require performance guarantees as a condition of approval to ensure mitigation or remediation. See Section 33.700.050, Performance Guarantees.

**33.865.210 Special Evaluation by a Professional**

A professional consultant may be hired to evaluate proposals and make recommendations if the Director of BDS finds that outside expertise is needed due to exceptional circumstances. The professional will have expertise in the specific resource or functional value or in the potential adverse impacts on the resource or functional value. A fee for these services will be charged to the applicant in addition to the application fee.